



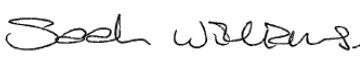
# TEST REPORT

**Test Report No. : UL-RPT-RP11023323JD01A V2.0**

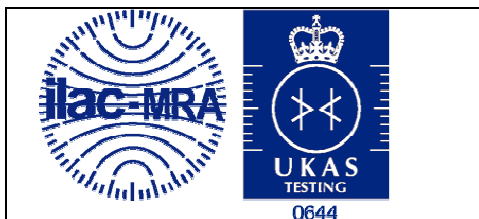
**Manufacturer** : Telensa Ltd  
**Model No.** : T2A1N-G-3  
**FCC ID** : XYD-2NXD  
**Technology** : FHSS  
**Test Standard(s)** : FCC Parts 15.209(a), 15.247(b)(2) & 15.247(d)

1. This test report shall not be reproduced in full or partial, without the written approval of UL VS LTD.
2. The results in this report apply only to the sample(s) tested.
3. The sample tested is in compliance with the above standard(s).
4. The test results in this report are traceable to the national or international standards.
5. Version 2.0 supersedes all previous versions.

**Date of Issue:** 15 January 2015

**Checked by:**   
Sarah Williams  
Engineer, Radio Laboratory

**Company Signatory :**   
Steven White  
Service Lead, Radio Laboratory  
UL VS LTD



This laboratory is accredited by UKAS.  
The tests reported herein have been  
performed in accordance with its terms  
of accreditation.

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## UL VS LTD

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**1. Customer Information**






<b>Company Name:</b>	Telensa Ltd
<b>Address:</b>	Plextek Building London Road Great Chesterford Essex CB10 1NY United Kingdom

## **2. Summary of Testing**

### **2.1. General Information**

<b>Specification Reference:</b>	47CFR15.247
<b>Specification Title:</b>	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.247
<b>Specification Reference:</b>	47CFR15.209
<b>Specification Title:</b>	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.209
<b>Site Registration:</b>	FCC: 209735
<b>Location of Testing:</b>	UL VS LTD, Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
<b>Test Dates:</b>	04 November 2015 to 08 January 2016

### **2.2. Summary of Test Results**

<b>FCC Reference (47CFR)</b>	<b>Measurement</b>	<b>Result</b>
Part 15.247(b)(2)	Transmitter Maximum Peak Output Power	
Part 15.247(d) / 15.209(a)	Transmitter Radiated Emissions	
Part 15.247(d) / 15.209(a)	Transmitter Band Edge Radiated Emissions	
<b>Key to Results</b>  = Complied  = Did not comply		

### **2.3. Methods and Procedures**

<b>Reference:</b>	ANSI C63.10-2013
<b>Title:</b>	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

### **2.4. Deviations from the Test Specification**

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

### **3. Equipment Under Test (EUT)**

#### **3.1. Identification of Equipment Under Test (EUT)**

<b>Brand Name:</b>	Telensa
<b>Model Name or Number:</b>	T2A1N-G-3
<b>Test Sample Serial Number:</b>	551
<b>Hardware Version:</b>	V 10
<b>Software Version:</b>	MS6.2
<b>FCC ID:</b>	XYD-2NXD

<b>Brand Name:</b>	Telensa
<b>Model Name or Number:</b>	T2A1N-G-3
<b>Test Sample Serial Number:</b>	543 ( <i>With External Connector #1</i> )
<b>Hardware Version:</b>	V 10
<b>Software Version:</b>	MS6.2
<b>FCC ID:</b>	XYD-2NXD

<b>Brand Name:</b>	Telensa
<b>Model Name or Number:</b>	T2A1N-G-3
<b>Test Sample Serial Number:</b>	669 ( <i>With External Connector #2</i> )
<b>Hardware Version:</b>	V 10
<b>Software Version:</b>	MS6.2
<b>FCC ID:</b>	XYD-2NXD

#### **3.2. Description of EUT**

The Equipment Under Test was a public lighting control unit. It contains an FHSS transceiver operating over six sub-bands in the 902–928 MHz band.

#### **3.3. Modifications Incorporated in the EUT**

No modifications were applied to the EUT during testing.

**3.4. Additional Information Related to Testing**

Tested Technology:	Frequency hopping system with a 20 dB bandwidth of less than 250 kHz and hopping on at least 50 frequencies		
Power Supply Requirement:	Nominal	120 VAC 60 Hz	
Type of Unit:	Transceiver		
Channel Spacing:	25 kHz		
Modulation:	2 level FSK		
Data Rates (bit/s)	62.5 & 500		
Maximum Conducted Output Power:	19.0 dBm		
Antenna Gain:	0.0 dBi		
Transmit Frequency Range:	902 MHz to 928 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	Sub-band 0 Channel 0	910.500
	Middle	Sub-band 2 Channel 58	915.000
	Top	Sub-band 5 Channel 58	919.975

### **3.5. Support Equipment**

The following support equipment was used to exercise the EUT during testing:

<b>Description:</b>	Representative road lighting luminaire
<b>Brand Name:</b>	Philips
<b>Model Name or Number:</b>	Broadway
<b>Serial Number:</b>	Not marked or stated

<b>Description:</b>	Linux PC
<b>Brand Name:</b>	Raspberry
<b>Model Name or Number:</b>	Not marked or stated
<b>Serial Number:</b>	Not marked or stated

<b>Description:</b>	1.5 metre cable with USB connector at one end and 6 pin connector at the other end
<b>Brand Name:</b>	Not marked or stated
<b>Model Name or Number:</b>	Not marked or stated
<b>Serial Number:</b>	Not marked or stated

<b>Description:</b>	Power supply
<b>Brand Name:</b>	Raspberry Pi PSU
<b>Model Name or Number:</b>	KSAS0060500100VKD
<b>Serial Number:</b>	Not marked or stated



## **4. Operation and Monitoring of the EUT during Testing**

### **4.1. Operating Modes**

The EUT was tested in the following operating mode(s):

- Constantly transmitting at maximum power on fixed frequencies.
- Constantly transmitting at maximum power in hopping mode.

### **4.2. Configuration and Peripherals**

The EUT was tested in the following configuration(s):

- Controlled using the test application 'icstest' on the Linux PC supplied by the customer. The application was used to enable a suitable transmission mode and to select the test channels and data rates. The EUT was connected to the Linux PC via a cable with USB connector at one end and 6 pin connector at the other end. Once the appropriate transmit mode was enabled, the PC was disconnected from the EUT.
- During all testing the EUT was connected to a representative road lighting luminaire. The luminaire was connected to a 120 VAC 60 Hz single phase supply.
- Radiated spurious emissions were performed with the EUT transmitting with a data rate of 62.5 bit/s. This was found to be the worst case with regards to emissions after preliminary investigations and, as this mode emits the highest output power level, it was deemed to be the worst case.
- The EUT was only tested in the one orientation (luminaire facing downwards), as this is representative of the orientation in which the complete configuration would be, in its operational mode.

## **5. Measurements, Examinations and Derived Results**

### **5.1. General Comments**

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to *Section 6. Measurement Uncertainty* for details.

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

## 5.2. Test Results

### 5.2.1. Transmitter Maximum Peak Output Power

#### Test Summary:

Test Engineer:	David Doyle	Test Date:	08 January 2016
Test Sample Serial Number:	669		

FCC Reference:	Part 15.247(b)(2)
Test Method Used:	ANSI C63.10 Section 7.8.5 & Notes below

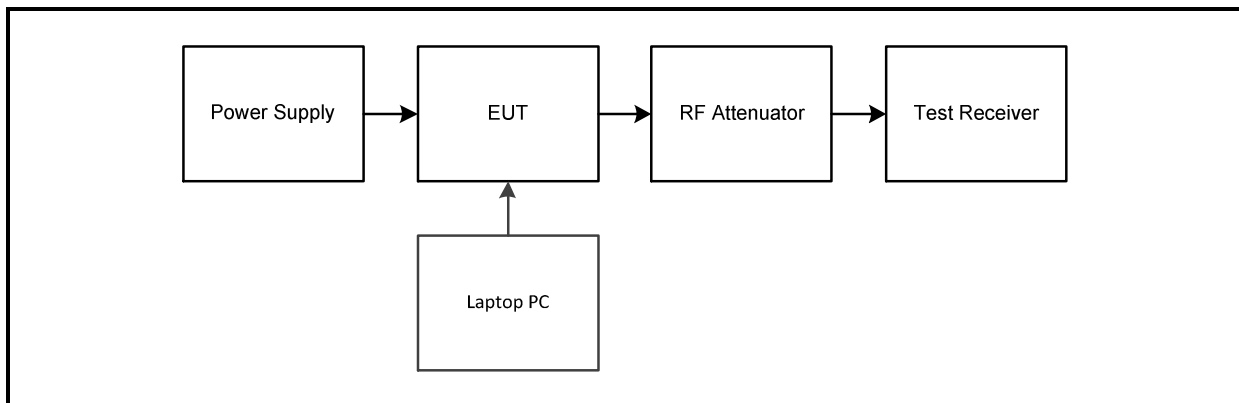
#### Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	35

#### Note(s):

1. For frequency hopping systems employing at least 50 hopping channels.
2. For the data rate of 62.5 bit/s, the test receiver's resolution bandwidth was set to 1 kHz and the video bandwidth to 3 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 3 kHz. A marker was placed at the peak of the signal and the results recorded in the table below.
3. For the data rate of 500 bit/s, the test receiver's resolution bandwidth was set to 2 kHz and the video bandwidth to 10 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 5 kHz. A marker was placed at the peak of the signal and the results recorded in the table below.
4. The test receiver was connected to the RF port on the EUT using suitable attenuation and RF cable. An RF offset level was entered on the test receiver to compensate for the loss of the attenuator and RF cable.
5. The conducted power measurements were performed under job number 11088495 as shown on the plots.

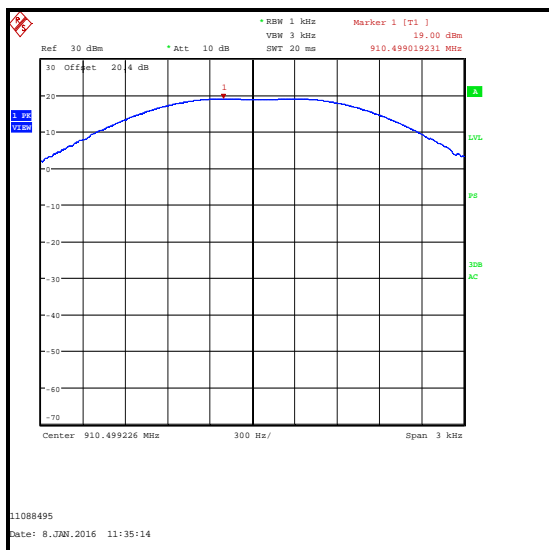
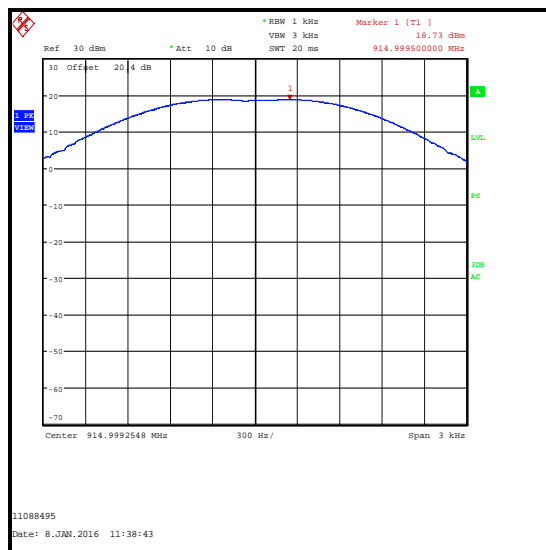
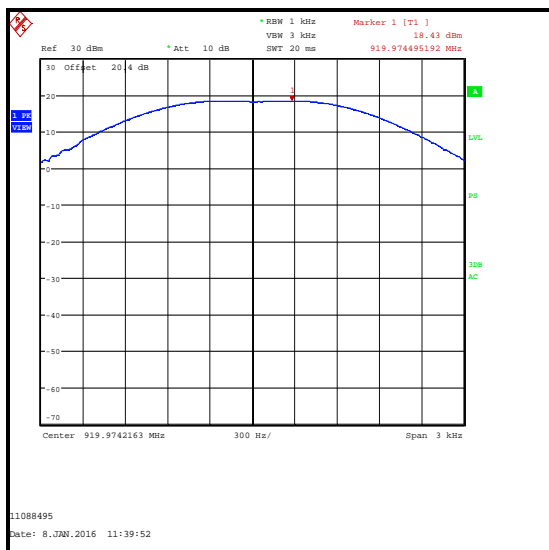
#### Test setup for Maximum Peak Output Power measurement:



**Transmitter Maximum Peak Output Power (continued)****Results: 62.5 bit/s**

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Note	Result
Bottom	19.0	30.0	11.0	1	Complied
Middle	18.7	30.0	11.3	1	Complied
Top	18.4	30.0	11.6	1	Complied

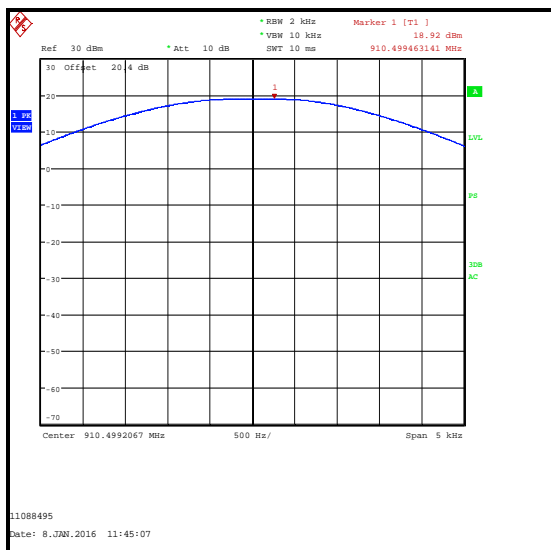
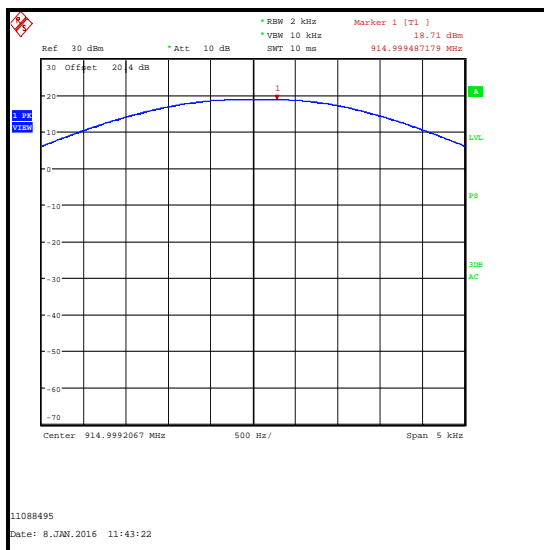
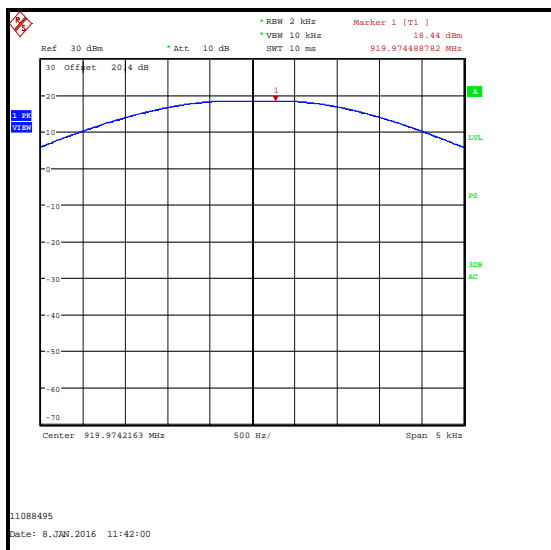
Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Note	Result
Bottom	19.0	0.0	19.0	36.0	17.0	1	Complied
Middle	18.7	0.0	18.7	36.0	17.3	1	Complied
Top	18.4	0.0	18.4	36.0	17.6	1	Complied

**Transmitter Maximum Peak Output Power (continued)****Results: 62.5 bit/s****Bottom Channel****Middle Channel****Top Channel**

**Transmitter Maximum Peak Output Power (continued)****Results: 500 bit/s**

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Note	Result
Bottom	18.9	30.0	11.1	1	Complied
Middle	18.7	30.0	11.3	1	Complied
Top	18.4	30.0	11.6	1	Complied

Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Note	Result
Bottom	18.9	0.0	18.9	36.0	17.1	1	Complied
Middle	18.7	0.0	18.7	36.0	17.3	1	Complied
Top	18.4	0.0	18.4	36.0	17.6	1	Complied

**Transmitter Maximum Peak Output Power (continued)****Results: 500 bit/s****Bottom Channel****Middle Channel****Top Channel****Test Equipment Used:**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M1656	Thermohygrometer	JM Handelpunkt	30.5015.13	Not stated	23 Apr 2016	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	12 Jun 2016	12
A2528	Attenuator	AtlanTecRF	AN18W5-20	832828#3	Calibrated before use	-
M260	Signal Generator	Rohde & Schwarz	SMP02	829076/008	27 Apr 2016	12
M199	Power Meter	Rohde & Schwarz	NRVS	827023/075	08 Apr 2016	24
M1267	Power Sensor	Rohde & Schwarz	NRV-Z52	100155	23 Apr 2016	24

**5.2.2. Transmitter Radiated Emissions****Test Summary:**

<b>Test Engineer:</b>	David Doyle	<b>Test Date:</b>	13 November 2015
<b>Test Sample Serial Number:</b>	551		

<b>FCC Reference:</b>	Parts 15.247(d) & 15.209(a)
<b>Test Method Used:</b>	ANSI C63.10 Sections 6.3 and 6.5
<b>Frequency Range</b>	30 MHz to 1000 MHz

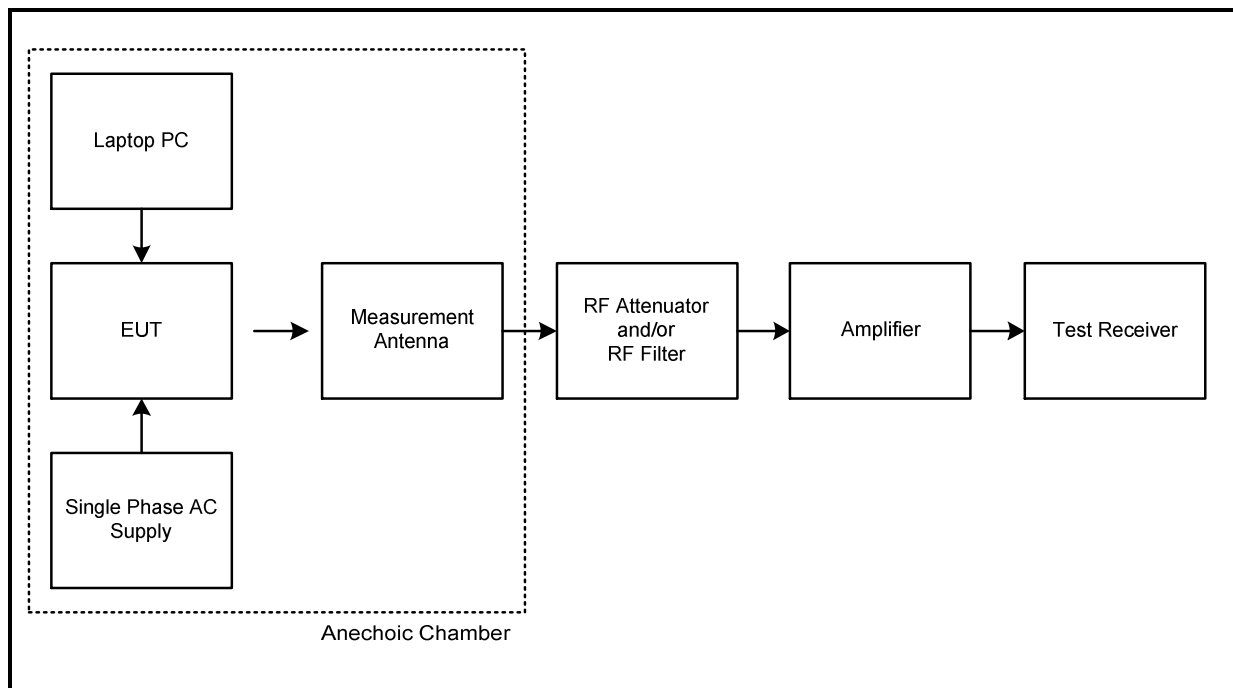
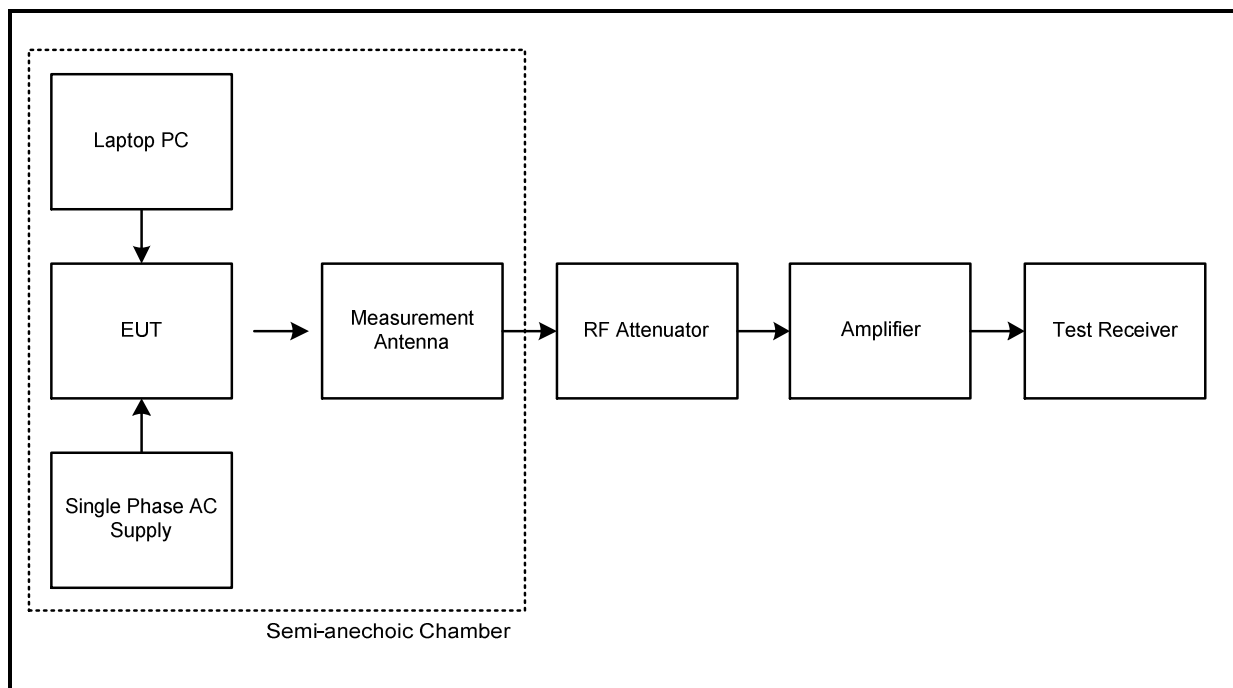
**Environmental Conditions:**

<b>Temperature (°C):</b>	24
<b>Relative Humidity (%):</b>	43

**Note(s):**

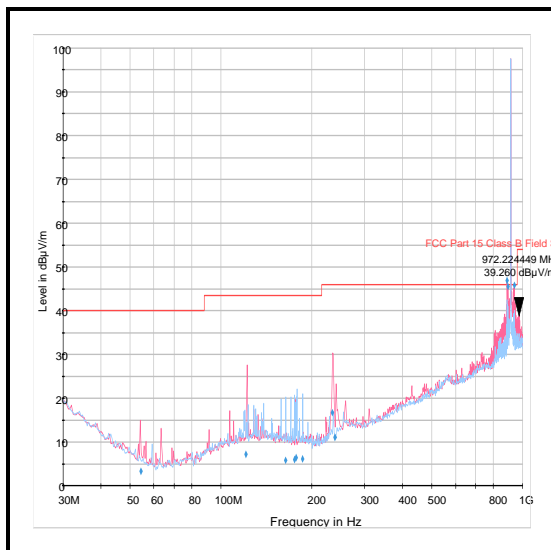
1. The EUT was transmitting at full power with a data rate of 62.5 bit/s.
2. The emission at 915 MHz shown on the 30 MHz to 1 GHz plot is the EUT fundamental.
3. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
4. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
5. All emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor. Therefore the highest peak noise floor reading of the measuring receiver was recorded in the table below.
6. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. Pre-scans were performed and markers placed on the highest measured levels. The test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. The sweep time was set to auto. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
8. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector and span wide enough to see the whole emission.



**Transmitter Radiated Emissions (continued)****Test setup for radiated measurements:**

**Transmitter Radiated Emissions (continued)****Results: Quasi-Peak**

Frequency (MHz)	Antenna Polarity	Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
972.224	Vertical	39.3	54.0	14.7	Complied

**Test Equipment Used:**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M1945	Thermohygrometer	JM Handelspunkt	30.5015.01	None stated	23 Apr 2016	12
K0001	5m RSE Chamber	Rainford EMC	N/A	N/A	19 Mar 2016	12
A259	Antenna	Chase	CBL6111	1513	09 Apr 2016	12
M1273	Test Receiver	Rohde & Schwarz	ESIB 26	100275	19 Mar 2016	12
G0543	Amplifier	Sonoma	310N	230801	10 Feb 2016	3
A1834	Attenuator	Hewlett Packard	8491B	10444	05 Mar 2016	12

**5.2.3. Transmitter Radiated Emissions****Test Summary:**

<b>Test Engineer:</b>	David Doyle	<b>Test Dates:</b>	04 November 2015 & 05 November 2015
<b>Test Sample Serial Number:</b>	551		

<b>FCC Reference:</b>	Parts 15.247(d) & 15.209(a)
<b>Test Method Used:</b>	ANSI C63.10 Sections 6.3 and 6.6
<b>Frequency Range</b>	1 GHz to 9.3 GHz

**Environmental Conditions:**

<b>Temperature (°C):</b>	23 to 24
<b>Relative Humidity (%):</b>	41 to 48

**Note(s):**

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. The EUT was transmitting at full power with a data rate of 62.5 bit/s.
3. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
4. In accordance with ANSI C63.10 Section 6.6.4.3 (Note 1), if the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.
5. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
6. Pre-scans were performed and markers were placed on the highest measured levels of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their own appropriate detectors during the pre-scan measurements.
7. Radiated spurious emissions were performed with the EUT transmitting at fixed frequencies. The field strength in hopping mode was investigated and found to be less than the field strength in static mode. Therefore transmitting in a single channel was deemed as worst case. Pre-scan plots with the EUT in hopping mode are archived on the UL VS LTD IT server and are available for inspection upon request.

**Transmitter Radiated Emissions (continued)****Results: Bottom Channel**

Frequency (MHz)	Antenna Polarity	Peak Level (dB $\mu$ V/m)	Average Limit (dB $\mu$ V/m)	Margin (dB)	Result
2731.396	Vertical	53.2	54.0	0.8	Complied
3642.176	Horizontal	50.3	54.0	3.7	Complied
4552.668	Horizontal	41.9	54.0	12.1	Complied
7283.933	Vertical	46.9	54.0	7.1	Complied

**Results: Middle Channel**

Frequency (MHz)	Antenna Polarity	Peak Level (dB $\mu$ V/m)	Average Limit (dB $\mu$ V/m)	Margin (dB)	Result
2745.072	Vertical	48.0	54.0	6.0	Complied
3660.008	Horizontal	51.5	54.0	2.5	Complied
4575.056	Horizontal	42.8	54.0	11.2	Complied
7320.008	Vertical	45.7	54.0	8.3	Complied

**Results: Top Channel**

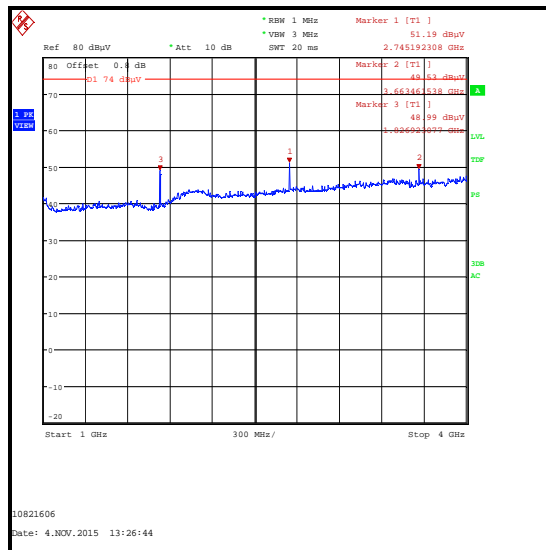
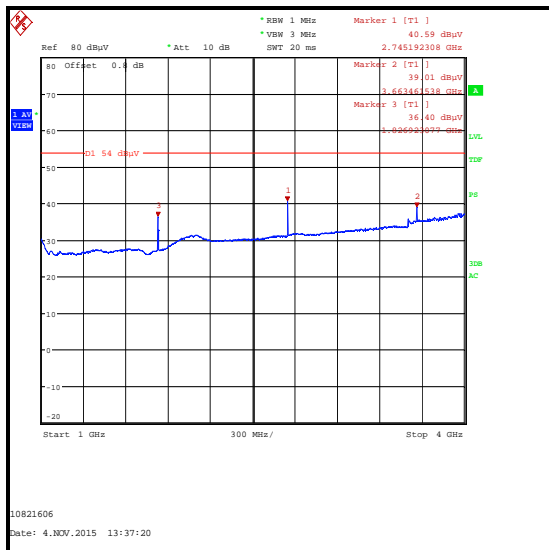
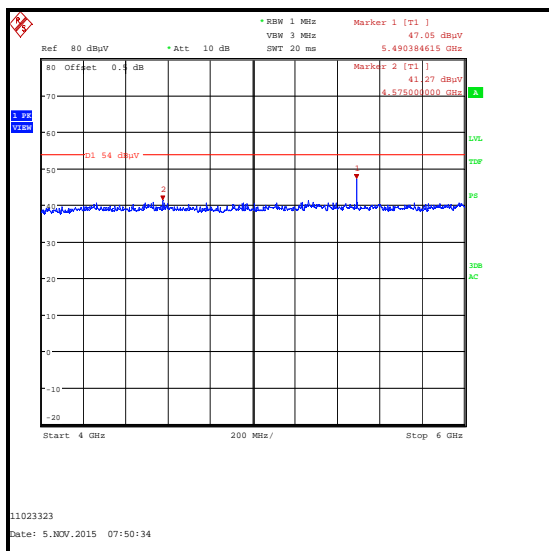
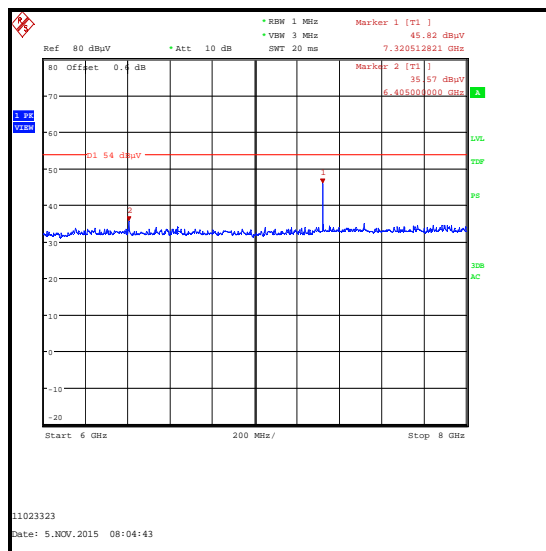
Frequency (MHz)	Antenna Polarity	Peak Level (dB $\mu$ V/m)	Average Limit (dB $\mu$ V/m)	Margin (dB)	Result
2759.869	Vertical	48.6	54.0	5.4	Complied
3679.908	Horizontal	51.7	54.0	2.3	Complied
4599.979	Horizontal	44.6	54.0	9.4	Complied
7359.824	Vertical	44.4	54.0	9.6	Complied

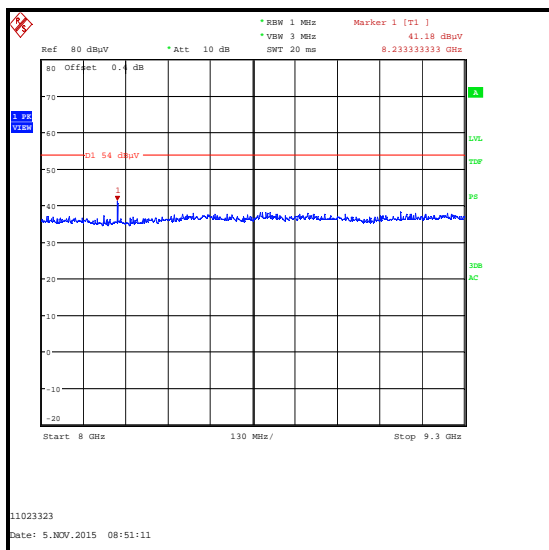
**Results: Peak / Hopping Mode**

Frequency (MHz)	Antenna Polarity	Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
Note 7					

**Results: Average / Hopping Mode**

Frequency (MHz)	Antenna Polarity	Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
Note 7					

**Transmitter Radiated Emissions (continued)****Average Detector****Peak Detector**

**Transmitter Radiated Emissions (continued)**

*Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.*

**Test Equipment Used:**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M1656	Thermohygrometer	JM Handelspunkt	30.5015.13	Not stated	23 Apr 2016	12
K0002	3m RSE Chamber	Rainford EMC	N/A	N/A	01 May 2016	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	12 Jun 2016	12
A1534	Pre Amplifier	Hewlett Packard	8449B	3008A00405	21 Dec 2015	12
A1818	Antenna	EMCO	3115	00075692	20 Dec 2015	12
A253	Antenna	Flann Microwave	12240-20	128	20 Dec 2015	12
A254	Antenna	Flann Microwave	14240-20	139	20 Dec 2015	12
A255	Antenna	Flann Microwave	16240-20	519	20 Dec 2015	12
A2467	High Pass Filter	Wainwright Instruments GmbH	WHJE5-920-1000-4000-60EE	2	13 Feb 2016	12
A1975	High Pass Filter	AtlanTecRF	AFH-03000	090424010	17 Apr 2016	12

**5.2.4. Transmitter Band Edge Radiated Emissions****Test Summary:**

<b>Test Engineer:</b>	David Doyle	<b>Test Date:</b>	04 November 2015
<b>Test Sample Serial Number:</b>	551		

<b>FCC Reference:</b>	Parts 15.247(d) & 15.209(a)
<b>Test Method Used:</b>	ANSI C63.10 Section 6.10.4

**Environmental Conditions:**

<b>Temperature (°C):</b>	23
<b>Relative Humidity (%):</b>	41

**Note(s):**

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. As both band edges fall within the non-restricted bands, only peak measurements are required. The test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The test receiver was left to sweep for a sufficient length of time in order to maximise the carrier level and out-of-band emissions. A reference level line was placed on the peak of the carrier and a second reference line was placed at -20 dBc. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission or noise floor level in the adjacent band. Marker frequencies and levels were recorded.
3. The plots have an incorrectly placed display line at -30 dBc. The limits in the tables have been corrected for -20 dBc.

**Results: Static Mode / 62.5 bit/s**

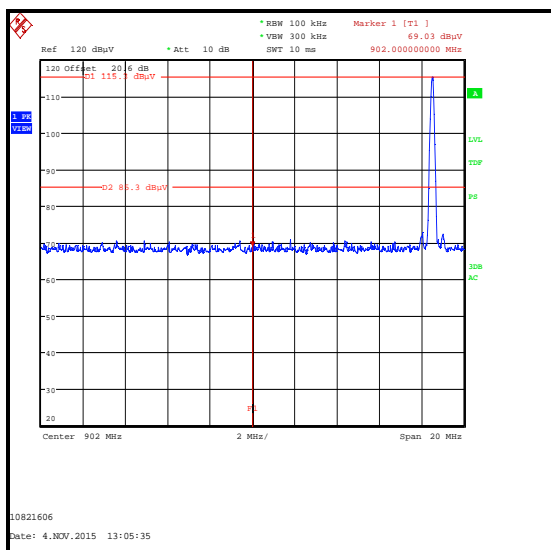
Frequency (MHz)	Peak Level (dBμV/m)	-20 dBc Limit (dBμV/m)	Margin (dB)	Result
902	69.0	95.3	26.3	Complied
928	68.3	95.7	27.4	Complied
928.994	70.6	95.7	25.1	Complied

**Results: Hopping Mode / 62.5 bit/s**

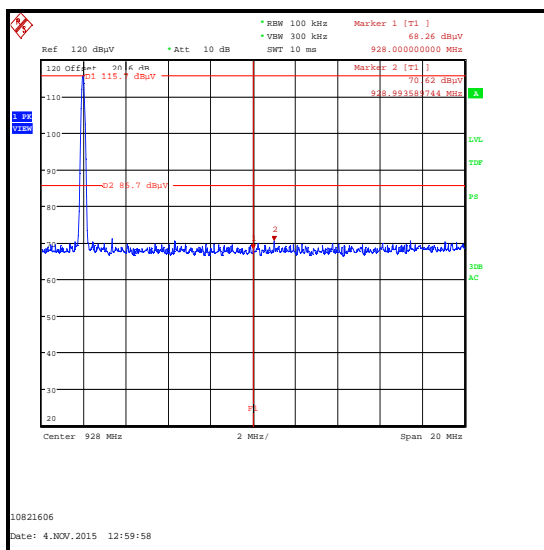
Frequency (MHz)	Peak Level (dBμV/m)	-20 dBc Limit (dBμV/m)	Margin (dB)	Result
902	68.7	95.3	26.6	Complied
928	68.0	95.6	27.6	Complied

### **Transmitter Band Edge Radiated Emissions (continued)**

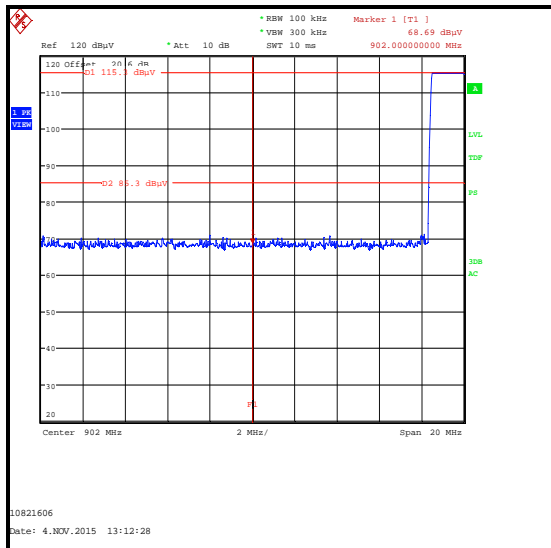
**Results: 62.5 bit/s**



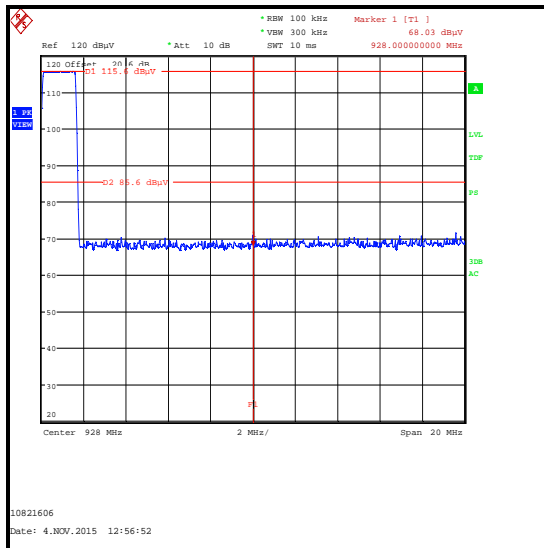
### Lower Band Edge / Static Mode



### Upper Band Edge / Static Mode



### Lower Band Edge / Hopping Mode



### Upper Band Edge / Hopping Mode

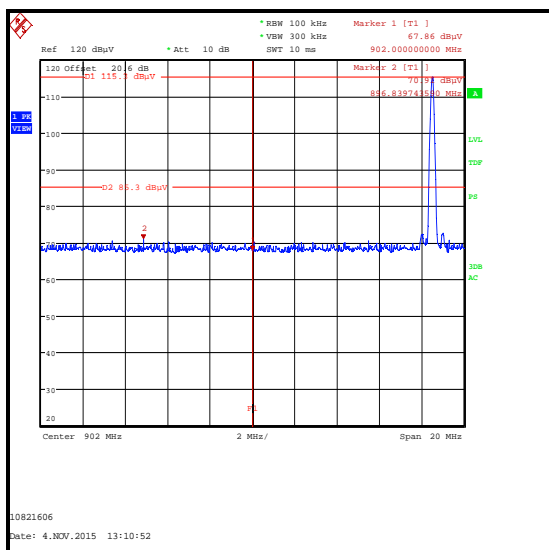
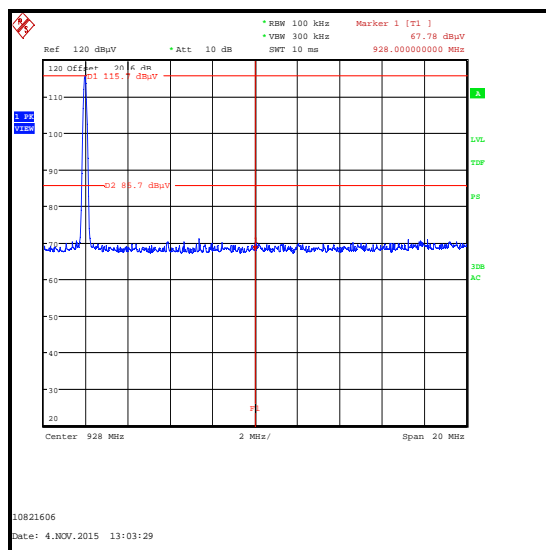
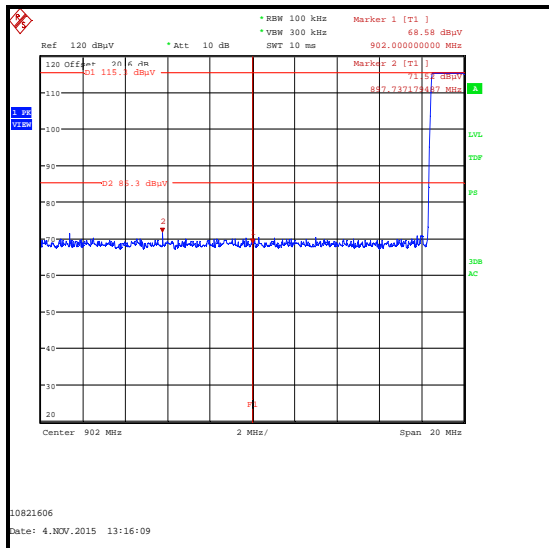
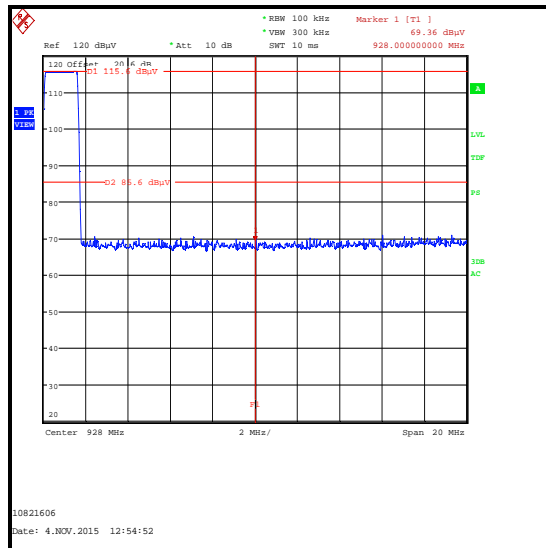


**Transmitter Band Edge Radiated Emissions (continued)****Results: Static Mode / 500 bit/s**

Frequency (MHz)	Peak Level (dB $\mu$ V/m)	-20 dBc Limit (dB $\mu$ V/m)	Margin (dB)	Result
896.840	70.9	95.3	24.4	Complied
902	67.9	95.3	27.4	Complied
928	67.8	95.7	27.9	Complied

**Results: Hopping Mode / 500 bit/s**

Frequency (MHz)	Peak Level (dB $\mu$ V/m)	-20 dBc Limit (dB $\mu$ V/m)	Margin (dB)	Result
897.737	71.5	95.3	23.8	Complied
902	68.6	95.3	26.7	Complied
928	69.4	95.6	26.2	Complied

**Transmitter Band Edge Radiated Emissions (continued)****Results: 500 bit/s****Lower Band Edge / Static Mode****Upper Band Edge / Static Mode****Lower Band Edge / Hopping Mode****Upper Band Edge / Hopping Mode****Test Equipment Used:**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M1656	Thermohygrometer	JM Handelspunkt	30.5015.13	Not stated	23 Apr 2016	12
K0002	3m RSE Chamber	Rainford EMC	N/A	N/A	01 May 2016	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	12 Jun 2016	12
A259	Antenna	Chase	CBL6111	1513	09 Apr 2016	12
A1393	Attenuator	Huber & Suhner	6820.17.B	757456	05 May 2016	12

## **6. Measurement Uncertainty**

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

<b>Measurement Type</b>	<b>Range</b>	<b>Confidence Level (%)</b>	<b>Calculated Uncertainty</b>
Conducted Maximum Peak Output Power	902 MHz to 928 MHz	95%	±1.13 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±5.65 dB
Radiated Spurious Emissions	1 GHz to 9.3 GHz	95%	±2.94 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

**7. Report Revision History**

Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	-	-	Initial Version
2.0	-	-	Sections 3.4 & 5.2.1 updated

--- END OF REPORT ---